

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

**CEASE AND DESIST ORDER NO. R7-2007-0059
REQUIRING APPLE CORE ENTERPRISES, INC.
APPLEBEE'S RESTAURANT WASTEWATER TREATMENT FACILITY
SAN BERNARDINO COUNTY
TO CEASE AND DESIST FROM
DISCHARGING WASTE CONTRARY TO REQUIREMENTS**

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Board) finds that:

1. Apple Core Enterprises Inc. (Discharger) owns and operates the wastewater treatment facility (WWTF) serving the Applebee's Restaurant at 57796 29 Palms Highway, in the Town of Yucca Valley.
2. The Hi-Desert Water District provides domestic water services to the Town of Yucca Valley. The District currently uses 17 groundwater wells, which draw from the Warren Valley Subbasin.
3. Data from the nearest supply wells indicate that groundwater is between 200 and 280 feet below ground surface (bgs).
4. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), as amended to date, designates the beneficial uses of the ground waters in this Region.
5. The discharge from the WWTF is taking place in the Joshua Tree Hydrologic Unit. The designated beneficial uses of ground waters in the Joshua Tree Hydrologic Unit are Municipal supply (MUN) and Industrial supply (IND).
6. The Town of Yucca Valley relies on the area's underlying aquifer for its domestic water supply, but most of the town's businesses and residents use septic tanks and subsurface disposal systems (i.e., leachfields and seepage pits) for treatment and disposal of domestic wastewater. Septic systems are the leading cause of groundwater contamination in the United States.
7. A study conducted by the United States Geological Survey in 2003 titled "Evaluation of the Source and Transport of High Nitrate Concentrations in Ground Water, Warren Subbasin, California" showed that nitrates from the town's septic systems, coupled with groundwater recharge in Yucca Valley, adversely impacted groundwater. The Warren Subbasin is within the Joshua Tree Hydrologic Unit.

Background

8. On November 4, 2005, the Discharger submitted an on-site wastewater disposal plan to the Regional Board proposing to use two septic tanks and seven seepage pits for treatment and disposal of wastewater from its restaurant.
9. On November 8, 2005, the Regional Board requested the Discharger to submit a complete Report of Waste Discharge (ROWD) and an engineering report, in support of the ROWD, to address concerns about the potential individual and cumulative impacts to groundwater quality from the proposed discharge cited in Finding No. 8, above.
10. On December 7, 2005, the Discharger submitted the requested ROWD and engineers report, proposing to install an upgraded wastewater treatment facility (WWTF), which in turn would upgrade the level of treatment for the proposed discharge to the seepage pits.
11. On December 12, 2005, the Discharger was granted interim coverage under Regional Board General Waste Discharge Requirements Order No. 97-500 so that it could open for business while the upgraded WWTF was coming on-line and while individual Waste Discharge Requirements were being drafted for Regional Board consideration of adoption. The WWTF began discharging wastes on January 19, 2006. The Discharger completed the upgrades on January 18, 2007.
12. The upgraded WWTF consists of two treatment trains and seven seepage pits for disposal of the effluent from the treatment trains. The first treatment train treats the kitchen wastewater, and the second train treats bathroom wastewater. The kitchen train consists of a 2,500-gallon grease trap, followed by three 1,500-gallon septic tanks employed as trash tank and two aeration tanks, arranged in series. These tanks are followed by a 9,000-gallon fixed media treatment system with aeration. The bathroom train consists of six 1,500-gallon tanks in series, followed by another 9,000-gallon fixed media unit. Wastewaters from both the kitchen train and the bathroom train are mixed together before being equally distributed to the two fixed media units. The entire WWTF, with the exception of the air blowers and control panel, is installed under the restaurant's asphalt parking lot.
13. On June 21, 2006, the Regional Board adopted Waste Discharge Requirements (WDRs) Order No. R7-2006-0030 to regulate discharges of treated wastewater from the WWTF. Board Order No. R7-2006-0030 specifies effluent limitations, prohibitions, specifications, and provisions necessary to protect the beneficial uses of ground waters in the Joshua Tree Hydrologic Unit and to prevent nuisance conditions. Permit coverage under General Order 97-500 was terminated at the Discharger's request on July 19, 2006.

Relevant Provisions of WDRs Order NO. R7-2006-0030

14. Regional Board WDRs Order No. R7-2006-0030, states in relevant part, that:

 "[B.8] WWTF effluent shall not exceed the following limits:

<u>Constituent</u>	<u>Unit</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>
BOD ₅	mg/L	30	45	65
Total Suspended Solids	mg/L	30	45	65
Nitrogen (as Total Nitrogen)	mg/L	10	15	20
Oil and Grease	mg/L	-	-	30

- “[E.2] The Discharger shall comply with Monitoring and Reporting Program (MRP) No. R7-2006-0030, and future revisions thereto, as specified by the Regional Board's Executive Officer.
- “[E.7] The Discharger shall comply with all of the conditions of this Board Order. Any noncompliance with this Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act and is grounds for enforcement action.”
- “[E.8] Within 30 days of the adoption of these Waste Discharge Requirements, the discharger shall submit an engineering report pursuant to Section 13267 of the California Water Code. The report shall be prepared by a registered civil engineer experienced in the design of domestic wastewater treatment and disposal facilities, describe the as-built WWTF and disposal system, and shall provide the following:
- a. A description of the type and location of the flow metering instrumentation installed to meet the effluent flow limit and MRP No. R7-2006-0030...”
- “[E.9] By July 15, 2006, the Discharger shall submit technical report in the form of a Quality Assurance Project Plan (QAPP) to conduct and submit the results of a study to characterize the sources contributing to the Total Dissolved Solids (TDS) concentrations of the effluent. The report shall be submitted to the Regional Boards Executive Officer for approval and contain a proposed time schedule for implementation and quality assurance (QA) procedures to:
- a. Obtain representative samples and analyses of the restaurant's source water for general minerals; and
 - b. Identify and describe salt sources, processes, and operations in the restaurant that have to potential to contribute to the increased TDS of the influent into the wastewater treatment plant; and
 - c. Obtain representative samples and analyses of the sources, processes, and operations cited in Item b., above;
 - d. Compare the TDS of the effluent with the TDS of the source water.”
- “[E.10] Following completion of, and based on the results of, the study requested in Provision [E.]9. above, but by no later than December 15, 2006, the Discharger shall submit a technical report in the form of a Source Control Plan to enable the Regional Board to establish, if necessary, a TDS effluent limitation. The report shall identify and/or evaluate alternatives to control to the maximum extent practicable TDS sources processes, and operations in the restaurant. In evaluating alternatives, the report shall address/provide:

- a. The cost per pound of salt removed from the discharge of each alternative plan, for each source identified in Provision 9, above;
- b. Discharger's financial and technical capability to implement the alternatives identified for source control;
- c. Proposed alternative for source control and proposed value of the proposed incremental increase; and
- d. A justification for the proposed incremental increase."

"[E.12] The Discharger shall, at all times, properly operate and maintain all systems and components of collection, treatment and control which are installed or used by the Discharger to achieve compliance with the conditions of this Board Order. Proper operation and maintenance includes effective performance, adequate process controls and appropriate quality assurance procedures. All systems both in service and reserved, shall be inspected and maintained on a regular basis. Records shall be kept of the inspection results and maintenance performed and made available to the Regional Board upon demand.

15. Monitoring and reporting Program No. R7-2006-0030, under "SECONDARY EFFLUENT MONITORING DURING SYSTEM STARTUP" states that:

"A sampling station shall be established at the point of discharge from the FAST units (at the D-box). During the initial startup period, until consistent levels of plant performance have been established, the following monitoring schedule shall be in place:

Constituents	Units	Type of Sample	Sampling Frequency	Reporting Frequency
pH	pH units	Grab	Weekly	Monthly
20° C BOD ₅	mg/L	Grab	Weekly	Monthly
Suspended Solids	mg/L	Grab	Weekly	Monthly
Settleable Solids	mg/L	Grab	Weekly	Monthly
Nitrite (NO ₂ -N) as Nitrogen	mg/L	Grab	Weekly	Monthly
Nitrate (NO ₃ -N) as Nitrogen	mg/L	Grab	Weekly	Monthly
Total Nitrogen	mg/L	Grab	Weekly	Monthly
Total Dissolved Solids	mg/L	Grab	Weekly	Monthly
Biocides / Disinfectants	Mg/L	Grab	Weekly	Monthly
VOCs ¹	µg/L ²	Grab	Monthly	Monthly
1 Volatile Organic Compounds testing is to be accomplished using the USEPA test methods 601 and 602 or 624				
2 Micrograms per liter				

16. Monitoring and reporting Program No. R7-2006-0030, under "SECONDARY EFFLUENT MONITORING" states that:

"After consistent levels of plant performance have been established, and after the Discharger has obtained written approval of the Regional Board Executive Officer, the following monitoring schedule shall be in place:

Constituents	Units	Type of Sample	Sampling Frequency ¹	Reporting Frequency ¹
pH	pH units	Grab	Monthly	Quarterly
20° C BOD ₅	mg/L	Grab	Monthly	Quarterly
Suspended Solids	mg/L	Grab	Monthly	Quarterly
Settleable Solids	mg/L	Grab	Monthly	Quarterly
Nitrite (NO ₂ -N) as Nitrogen	mg/L	Grab	Monthly	Quarterly
Nitrate (NO ₃ -N) as Nitrogen	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly
Total Dissolved Solids	mg/L	Grab	Monthly	Quarterly
VOCs	µg/L	Grab	Annually	Annually
¹ When analysis show noncompliance with the limitations prescribed by Discharge Specification No. B.7, the Discharger shall increase the sampling frequency, for the constituents that are in noncompliance, to 1 sample per week, and continue sampling at that minimum frequency until either (a) the sampling shows compliance for two consecutive months or (b) it is notified by the Executive Officer that it can resume the normal sampling schedule.				

Violations of WDRs Order No. R7-2006-0030

17. Self-monitoring data submitted by the Discharger show that the Discharger has been in chronic violation of the effluent limits for BOD and TSS; and in violation of the Nitrogen limits established by Discharge Specification B.8 of WDRs Order No. R7-2006-0030, cited above in Finding No. 14. As of April 6, 2007, the total number of violations for BOD, TSS, and nitrogen is three hundred seventy-three (373). Attachment A, which is incorporated in and made a part of this Order by reference, quantifies these violations.
18. The Discharger has not submitted the QAPP required by Provision No. E.9 of WDRs Order No. R7-2006-0030, cited in Finding No. 14, above. Therefore, the Discharger is in chronic violation of Provision No. E.9. As of April 20, 2007, the report has been late two hundred seventy days (270).
19. Because the Discharger has not submitted the QAPP, it is also late in meeting the deadline specified by Provision No. E.10 of WDRs No. R7-2006-0030, cited in Finding No. 14, above. Each day the Discharger is late in complying with the deadline counts as a violation of WDRs Order No. R7-2006-0030. As of April 20, 2007, the Discharger is one hundred twenty-six (126) days late in complying with Provision No. E.10.
20. Because the Discharger's WWTF has yet to establish consistent levels of performance, the Discharger has not obtained written approval from the Executive Officer to implement the reduced sampling and reporting frequency specified in Finding No. 16, above. Therefore, the monitoring frequency in effect is the one cited in Finding No. 15, above.
21. Every single self-monitoring report (SMR) the Discharger has submitted in response to MRP No. R7-2006-0030 has been late or incomplete. The reports are late because the Discharger has failed to submit them by the deadline specified in MRP No. R7-2006-0030. The reports are incomplete because the Discharger has failed to monitor at the frequency and for all of the parameters specified in MRP No. R7-2006-0030, cited in Finding No. 15,

above. Every day a report is late counts as one violation of the WDRs Order No. R7-2006-0030. Each time the Discharger fails to sample for a parameter at the specified frequency counts as a separate daily violation. As of April 6, 2007, the number of violations for late SMRs is one hundred ninety-four (194), and the number of violations for incomplete SMRs is two hundred twenty-six (226). Attachment B, which is incorporated in and made a part of this Order by reference, shows the parameters for which the Discharger failed to monitor as required by MRP No. R7-2006-0030. Attachment C, which is incorporated in and made a part of this Order by reference, shows the number of days each report was late.

22. Based on the effluent violations cited above in Finding No. 17, the QAPP violations cited above in Finding No. 18, and the monitoring and reporting violations cited above in Finding No. 21, the Discharger has been in chronic violation of Provision No. E.12 of WDRs Order No. R7-2006-0030, cited above in Finding No. 14, since July 2006. As of April 20, 2007, the number of daily violations of Provision No. E.12 is two hundred ninety-three (293).

Legal, Technical, and Other Considerations

23. The original design of the WWTF specified that the effluents from the two fixed media treatment units were to be commingled at a single distribution box (d-box) before being distributed to the seven seepage pits. Effluent sampling was to occur at this single d-box. Installation of the WWTF apparently occurred such that each fixed media unit has its own separate distribution box, and the effluents from the two units are not mixed together before being discharged.
24. In early March 2007, it was discovered that a WWTF return activated sludge (RAS) pump had been installed backwards in the bathroom treatment train, and is not pumping from the correct tank. Other variations from the original design may have occurred during installation, and could be contributing to the ongoing problems.
25. The WWTF has been in chronic violation of the effluent limits specified by Discharge Specification No. B.8, the technical report provisions and the salt control requirements of Provision Nos. E.9 and E.10, the operation and maintenance requirements of Provision No. E.12, and the monitoring and reporting requirements contained in WDRs Board Order No. R7-2007-0030.
26. On April 26, 2007, and pursuant to Section 13350 of the California Water Code (CWC), the Regional Board Assistant Executive Officer (AEO) issued Administrative Civil Liability Complaint No. R7-2007-0057 proposing that the Discharger pay twenty-five thousand dollars (\$25,000) in liability based on violations of WDRs Order No. R7-2006-0030. The AEO also urged the Discharger to submit the missing QAPP as soon as practicable; notified the Discharger that failure to do so may result in additional administrative civil liability of up to \$5,000 per day for every day the report is late; and advised the Discharger that liability for this overdue report and related violation to implement controls for the total dissolved solids in the discharge would be assessed retroactively to April 21, 2007. As of May 3, 2007, the Discharger has not submitted the QAPP.

27. Section 13301 of the CWC states, in relevant part, that:

"When a regional board finds that a discharge of waste is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action...Cease and Desist Orders may be issued directly by a board, after notice and hearing."

28. Section 13267(b) of the California Water Code states:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

29. The Discharger owns and operates the treatment and disposal facilities subject to this Order. Technical reports, including workplans, are necessary to bring on-site discharges into full compliance with the Waste Discharge Requirements Order No. R7-2006-0030 and with this Order.
30. The Discharger cannot achieve immediate compliance with WDRs Board Order No. R7-2006-0030. As a result, discharges of waste are taking place in violation of Order No. R7-2006-0030. Therefore, this Cease and Desist Order (Order) requires the Discharger to undertake certain actions to ensure consistent compliance with the Regional Board's requirements.

Public Participation and Compliance with CEQA

31. The Regional Board has notified the Discharger and all known interested agencies and persons of its intent to issue this Order and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
32. The Regional Board, in a public meeting, heard and considered all comments pertaining to this Order.
33. This enforcement action is exempt from the provisions of CEQA, pursuant to Section 15321 (Enforcement Actions by Regulatory Agencies), Article 19, Chapter 3, Division 6, Title 14, California Code of Regulations.

IT IS HEREBY ORDERED, that in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, the Discharger shall:

1. Cease and desist discharging wastes in violation of waste discharge requirements and implement corrective actions in accordance with the tasks and time schedules specified below.
2. **Compliance with MRP No. R7-2006-0030**—The Discharger shall **immediately** comply with all aspects of MRP No. R7-2006-0030.
3. **Compliance with Effluent Limits—By August 6, 2007**, the Discharger shall submit a technical report in the form of workplan to determine WWTF deficiencies, including but not limited to construction and O&M deficiencies, which are causing and/or contributing to violations and threatened violations of Discharge Specification No. B.8 of WDRs Order No. R7-2006-0030. The workplan shall include (a) the proposed tasks, milestones, and schedule to determine the WWTF deficiencies; and (b) the task and milestones to correct the deficiencies and bring the discharge from the WWTF in compliance with Discharge Specification No. B.8 of WDRs Order No. R7-2006-0030 at the earliest practicable date, but no later than **December 15, 2007**.
4. **Flow Metering Instrumentation—By December 15, 2007**, the Discharger shall submit a Flow Meter Installation Report showing that it has installed an effluent flow meter and that the meter is operational and accurately recording flows.
5. **Revised O&M Manual—By January 15, 2008**, the Discharger shall submit a technical report in the form of a revised O&M manual for its WWTF that reflects the corrections implemented pursuant to Item Nos. 2, 3, and 4, above; includes “as-built” plans (1” = 200 ft scale or better) for the WWTF and its critical treatment and disposal components; and specifies the quality assurance procedures to be implemented by WWTF personnel to ensure consistent compliance with Provision No. E.12 of WDRs Order No. R7-2006-0030, including:
 - a. A written work order system that tracks all corrective maintenance;
 - b. An equipment history file for each major piece of equipment such as pumps, motors, generators, etc.;
 - c. A written schedule of preventive maintenance broken down into weekly, monthly and annual inspections;
 - d. A written schedule of the prescribed monitoring and reporting requirements of WDRs Order No. R7-2006-0030;
 - e. A written summary or check sheet documenting at least the date and type of preventive maintenance work actually performed;
 - f. A calibration schedule and records for all instruments and flow measuring devices;
 - g. Written emergency response guidelines;
 - h. A logbook for the operators and maintenance workers in which to document both the routine tasks and any unusual observations;
 - i. A system to track the time and cost for major repairs;

- j. A list of backlogged work orders; and
 - k. Periodic specialized tests or analyses performed on the critical or expensive pieces of WWTF equipment/components.
6. **TDS Source Control**—By January 15, 2008, the Discharger shall submit a technical report in the form of a written certification that it has implemented a QAPP that has been approved by the Executive Officer and addresses compliance with Provision No. E.10 of WDRs Order No. R7-2006-0030.
7. Plans and schedules are subject to the prior approval of the Executive Officer. Failure to comply with the terms of this Order may result in administrative civil liability of up to \$10,000 per day for each violation pursuant to Sections 13268 and 13350 of the California Water Code.
8. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.
9. If in the opinion of the Executive Officer, the Discharger violates this Order, allows the magnitude or frequency of violations to increase, or fails to timely implement corrective measures as specified herein, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.
- I, Robert Perdue, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on June 26, 2007.


ROBERT PERDUE, Executive Officer